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INTER-OFFICE CORRESPONDENCE

Richmond, Virginia

To: Pat Grantham

Date: April 10, 1992

From:

C. T. Spielberg CTS

Subject: EVALUATION OF ROD TO ROD BLEND VARIATION

OBJECTIVE:

To identify how much rod to rod variation exists in the cigarette blend components of Philip Morris USA products.

INTRODUCTION:

The measurement of blend components is performed in the Microscopy section utilizing acetone floatation and microscopic picking of materials.

TEST PLAN:

- A. Sampling
 - 1. The following four (4) brands will be sampled to provide a variety of blends: Bristol FF 100, Cambridge Lowest 100, Marlboro KS, and Merit Ultra Lts KS.
 - 2. For each brand, three (3) samples of 100 cigarettes will be collected off of one (1) machine. These three samples will be collected one (1) per shift, during a 24-hour period. Each sample will be collected at a single point in time, any time during the shift other than immediately following start-up. Each sample will be stored separately in a container.
- B. RL, RCB, ES, & Tobacco Percentage Testing

 Percentages of RL, RCB, and ES will be determined by a picking

 procedure under a microscope. Each sample of 100 cigarettes

 will be randomly sampled for 20 rods to be picked (center third

 of rod) and will deliver 20 data points each of RL, RCB, and ES.
- C. <u>ET Percentage Testing</u>

Percentage of ET will be determined by acetone floatation. This procedure requires 18 cigarettes for each run. Each sample of 100 cigarettes will be randomly sampled for 4 samples of 18 rods to result in 4 runs.

D. Statistical Treatment of Data

The data will be treated to one-way analysis of variance to determine how much variation exists between cigarette rods in the blending process. The variation in the method has been examined and found to be minimal compared to the total rod to rod variation in Industry Monitor #14.

cc: Bob Fenner Nancy Ryan